# ENVIRONMENTAL ELEMENT

## GOAL

Continue protection of Renton's natural systems, natural beauty, and environmental quality.

**Summary**: The purpose of the environmental policies is to provide the policy background and basis for future environmental actions by the City of Renton as it attempts to balance urbanization, economic development, and natural area protection. Environmental policies address substantive issues such as development within floodplains, wetlands, and steep slopes and procedural issues such as how these areas should be mapped and how they should be regulated. Environmental policies will be implemented through economic development decisions, critical areas regulations, and incentives for environmental protection. *(See the Employment Area - Industrial and Open Space Sections of the Land Use Element, Stormwater Section of the Capital Facilities Plan Element, Stormwater & Aquifer Protection Sections of the Utilities Element for policies related to Environmental Element.)*

## General Objective and Policies

***Discussion:*** *Development clustering, preservation of significant natural features, and retention of or establishment of vegetated corridors are examples of development patterns that implement these objectives.*

**Objective EN-A:** Protect, restore and enhance environmental quality through land use plans and patterns, surface water management programs, park master programs, development reviews, incentive programs and work with citizens, land owners, and public and private agencies.

**Policy EN-1.** Prevent development on lands where development would create hazards to life, property, or environmental quality.

### Surface Water

***Discussion:*** *The quality of surface water resources is important for the City of Renton for public health and safety reasons, as well as recreational and environmental reasons. Surface water pollution may ultimately mean aquifer pollution.*

*High water quality can be achieved through the use of Best Management Practices for industries and businesses. Preservation of riparian corridors can protect receiving waters from storm water effects such as erosion and sedimentation. Further protection of surface water will come through aquifer protection policies and ordinances, which could limit discharges of pollutants. Land uses are suggested in the plan which will also secondarily address surface water impacts.*

**Objective EN-B:** Protect and enhance water quality of surface water resources.

**Policy EN-2.** Manage water resources for multiple uses including recreation, fish and wildlife, flood protection, erosion control, water supply, energy production, and open space.

**Policy EN-3.** Minimize erosion and sedimentation by requiring appropriate construction techniques and farming practices.

**Policy EN-4.** Limit discharges of pollutants such as chemicals, insecticides, pesticides, and other hazardous wastes to surface waters.

**Rivers and Streams**

***Discussion:*** *The rivers and streams within the City hold great importance for the citizens. These waterways can be protected through three measures: preservation of their courses, their banks, and the vegetation next to them. For areas that have already been degraded, all efforts should be made to restore them. For new areas, the natural systems should be protected. For example, the use of closed pipe drainage systems for streams in developments should be prohibited except where no other feasible alternative exists and where the closed system will not cause any significant degradation of water quality or habitat.*

**Objective EN-C:** Protect and enhance the City's rivers, major and minor creeks and intermittent stream courses.

**Policy EN-5.** Degraded channels and banks should be rehabilitated by public programs and new development.

**Policy EN-6.** Develop land use regulations which establish and enhance setbacks along all waterways and intermittent stream courses. The purpose of the setbacks would be to retain an enhancement of the natural vegetation for infiltration, maintenance of wildlife habitat and normal water temperatures, filtration, and the retardation of run-off and erosion.

**Policy EN-7.** If crossings and/or access points are required across fishbearing river and stream channels, improvements should be made in the following order of priority:

1. Crossing and bridges which access several properties.
2. If crossings and bridges are not feasible, culverts could be used which are oversized and have gravel bottoms which maintain the channel's width and grade.

**Wetlands**

**Discussion:** *The City has over 350 acres of wetlands at the time of this writing. These wetlands provide flood storage, wildlife habitat, water quality protection, water quantity or infiltration, aesthetic relief, erosion and sedimentation control, and pollutant removal. In some areas of the City, the natural functioning of these wetlands is integral to protection of properties from flooding.*

**Objective EN-D:** Preserve and protect wetlands for overall system functioning.

**Policy EN-8.** Achieve no overall net loss of the City's remaining wetlands base.

**Policy EN-9.** In no case should development activities decrease net acreage of existing wetlands.

**Policy EN-10.** Establish and protect buffers along wetlands to facilitate infiltration and maintain stable water temperatures, provide for the biological regime, reduce amount and velocity of run-off, and provide for wildlife habitat.

**Policy EN-11.** Water level fluctuations in wetlands used as part of storm water detention systems should be similar to the fluctuations under natural conditions. The utilization, maintenance, and storage capacity provided in existing wetlands should be encouraged.

**Policy EN-12.** Pursue all potential funding sources in order to purchase significant wetlands.

**Policy EN-13.** When development may impact wetlands, the following hierarchy should be followed in deciding the appropriate course of action:

a. avoid impacts to the wetland,
b. minimize impacts to the wetland,
c. restore the wetland when impacted,
d. recreate the wetland at a ratio which will provide for its assured viability and success,
e. enhance the functional values of an existing degraded wetland.

**Policy EN-14.** Provide a ranking system for wetlands based on their acreage and quality. High quality wetlands should have more protection under this system.

**Policy EN-15.** Provide incentives for an overall net gain of wetland functions and values of new development.

**Policy EN-16.** Encourage public access to wetlands for use when sensitive habitats are protected.

**Policy EN-17.** Meet water quality standards prior to discharging surface water into wetlands.

**Flood Plains**
**Objective EN-E:** Protect the natural functions of 100 year floodplains and floodways.

**Policy EN-18.** Prohibit permanent structures from developing in floodways due to risks associated with deep and fast flowing water.

**Policy EN-19.** Limit development within the 100 year floodplain to that which is not harmed by flooding. Roads and finished floors of structures should be located above the 100 year flood level and new development should provide compensation for existing flood storage capacity due to filling.

**Policy EN-20.** Restrict land uses to those which do not cause backwater or significantly increase the velocity of floodwaters.

**Policy EN-21.** Incorporate design features which are intended to keep harmful substances from flood waters in any development which is allowed in the 100 year floodplain.

**Policy EN-22.** Emphasize non-structural methods in planning for flood prevention and damages reduction.

**Policy EN-23.** Dredge the Cedar River bed as one method of flood control.

**Stormwater**
***Discussion:*** *With the average annual rainfall as high as it is in the City, storm water control is an important concern. Regional and localized flooding is found in downtown Renton and in the Green*

*River Valley. While various agencies manage the rivers for flood control, large amounts of storm water from impervious surfaces contribute to the flooding situation. As the drainage basins continue to develop in King County and other Green River Valley cities, more storm water passes through Renton, the final downstream jurisdiction for these basins.*

*Engineering techniques can control much of the stormwater through detention and retention systems. However, the cumulative effects of storm water can only be managed by a combination of engineering and preservation of natural systems such as streams, rivers, and wetlands. These policies work in concert then, with the previous natural system policies.*

*Individuals can aid in stormwater management through Best Management Practices at the single family home or single business level.*

**Objective EN-F:** Conduct a stormwater management program which optimizes Renton's water resources.

**Policy EN-24.** Maintain and enhance natural drainage systems to protect water quality, reduce public costs, and prevent environmental degradation.

**Policy EN-25.** Preserve natural surface water storage sites that help regulate service flows and recharge groundwater.

**Policy EN-26.** Provide local funding for the stormwater program through Storm Water Utility.

**Policy EN-27.** Control quantity and quality of stormwater run-off from all new development to be consistent with or improved over existing conditions.

**Policy EN-28.** Minimize on-site erosion and sedimentation during and after construction.

**Policy EN-29.** Route stormwater run-off from new development to avoid gully erosion or landslides in ravines and steep hillsides.

**Policy EN-30.** Industries and businesses should use best management practices to prevent erosion and sedimentation and to prevent pollutants from entering ground or surface waters.

**Policy EN-31.** Implement surface water management systems which protect natural features whenever feasible.

**Policy EN-32.** Promote means of flow control, when required in waterways, that maintain the channel in as natural a state as possible.

**Policy EN-33.** Use, maintain, and enhance the natural stormwater storage capacity provided in existing significant wetlands.

**Policy EN-34.** Use interlocal agreements and cooperative planning programs to coordinate, where appropriate, with King County, Tukwila, and Kent and other agencies for stormwater management.

**Policy EN-35.** Actively participate in non-point source pollution watershed plans including those for the May Creek, Cedar River, and Green River Basins.

**Objective EN-G:** Provide a storm and surface water control and drainage system capable of preventing threats to life, property and public safety during a 100 year flooding event.

**Policy EN-36.** Promote the return of precipitation to the soil at natural rates near where it falls through the use of detention ponds, grassy swales, and infiltration where feasible.

**Policy EN-37.** Promote development design which minimizes impermeable surface coverage by limiting site coverage and maximizing the exposure of natural surfaces.

**Policy EN-38.** Manage the cumulative effects of storm water through a combination of engineering and preservation of natural systems.

**Objective EN-H:** Support and sustain educational, informational, and public involvement programs in the City over the long term in order to encourage effective use, preservation, and protection of Renton's water resources.

**Policy EN-39.** Provide information for and participate in informing and educating individuals, groups, businesses, industry, and government in the protection and enhancement of the quality and quantity of the City's water resources.

**Policy EN-40.** Increase the community's understanding of the City's ecosystem and the relationship of the ecosystem to water resources.

**Policy EN-41.** Create the long-term community commitment that will be necessary to sustain efforts to protect the City's water resources and maintain and improve water quality through educational programs.

**Ground Water Resources**

***Discussion:*** *In 1988, the Environmental Protection Agency designated the Cedar River aquifer as a sole source aquifer for the potable water for the City of Renton. 98% of the City's water supply comes from that aquifer or from springs in the Talbot Road area. Strong policies protect these supplies through a variety of methods, including protection of natural systems and careful regulation of development in sensitive aquifer areas.*

**Objective EN-I:** Ensure the long-term protection of the quality and quantity of the groundwater resources of the City of Renton in order to maintain a safe and adequate potable water supply for the City.

**Policy EN-42.** Designate and protect areas of critical recharge and other associated aquifers within the City and the sphere of influence through coordination with surrounding jurisdictions.

**Policy EN-43.** Emphasize the use of open ponding and detention, grassy swales, clean roof run-off, and other stormwater management techniques that maximize water quality and infiltration where appropriate and which will not endanger groundwater quality.

**Policy EN-44.** Acquire the most sensitive lands such as wetlands and flood plains for conversion to parks and greenbelts.

**Policy EN-45.** Any businesses relocating to the downtown that use or store materials regulated by the Aquifer Protection Ordinance should be sited outside of Zone 1 of the aquifer.

**Objective EN-J:** Increase the participation by the City of Renton in resolution of regional ecological issues that may impact aquifer protection.

**Policy EN-46.** Promote the use of interlocal agreements with other agencies to restrict land use in sensitive aquifer recharge areas to minimize possible sources of pollution and the potential for erosion, and to increase infiltration.

**Policy EN-47.** Actively participate in regional highway planning, construction, and traffic restrictions.

**Policy EN-48.** Discourage the continued use of, and hauling of waste to, the Cedar Hills landfill through the City of Renton.

**Policy EN-49.** Participate in land use and sewerage decisions in outlying areas of the City's aquifer.

**Fisheries and Wildlife Resources**

***Discussion:*** *The City of Renton, unlike many major Puget Sound cities, has several unique areas of habitat. The Cedar River supports major fish runs during the year. Springbrook Creek, Honey Creek, and May Creek also provide habitat for salmonids. The Black River forest provides habitat for over 35 species of birds, including heron and eagles, and many small mammals. The Cedar River, May Creek, and Panther Creek corridors have forested, meadow, and shrub habitats that provide shelter and food for many species. Deer have been spotted migrating through the power line corridors which criss-cross the City.*

*Besides these east-west corridors, a north-south corridor of habitat exists stretching from the Cedar River drainage to the May Creek drainage directly outside the city limits on the plateau.*

*These policies provide for preservation of these habitats. A variety of methods could be used to implement these policies: conservation easements, large lot zoning, city open space purchase and wildlife management, setbacks, retention of vegetation in various areas, and landscaping regulations specifying native vegetation which would provide food and shelter for wildlife.*

**Objective EN-K:** Protect and enhance wildlife habitat throughout the City.

**Policy EN-50.** Identify unique and significant wildlife habitat as defined by Washington State Habitat and Species Project and ensure that buildings, roads, and other features are located on less sensitive portions of a site.

**Policy EN-51.** Identify and preserve corridors connecting habitat acquisition, regulation of development proposals, and other means.

**Policy EN-52.** Encourage preservation and enlargement of existing habitat areas through development incentives.

**Policy EN-53.** Re-establish self- sustaining fisheries resources in appropriate rivers and creeks through encouragement of hatcheries and salmonid use.

**Policy EN-54.** Retain and enhance aquatic and riparian habitats by requiring vegetated buffers for all new development along waterway corridors.

**Process**

***Discussion:*** *These policies provide an integrated approach for the regulation and management of environmental areas based on the value of the resource and/or the severity of the hazards. The maps reveal that several of the critical areas often occur simultaneously and provide wildlife habitat if un-developed. The policies envision a two- tiered approach to these areas: the most hazardous should be designated as critical corridors; the second as environmentally sensitive and should include agriculture, mineral, forest lands, and wildlife habitat not associated with a critical area. Regulations and land use designations could be provided to these two groups allowing for development where appropriate.*

**Objective EN-L:** Environmentally sensitive areas should be identified and regulated to protect life and property according to the severity of the natural hazards.

**Policy EN-55.** The following should be considered in designating and controlling environmentally sensitive sites:

a) critical areas and resource lands inventory;
b) steep slopes, drainage swales, lakes, wetlands, bogs, streams, rivers, or other surface water bodies;
c) unstable or water bearing soils;
d) unique flora and unique fauna;
e) historic and archeological sites; and
f) unique natural features.

**Policy EN-56.** Maintain an inventory of environmentally sensitive areas including descriptions of criteria for designation and maps.

**Policy EN-57.** Regulate identified sensitive areas through the implementation of regulations addressing uses, densities, clearing, grading, and/or vegetation removal.

**Policy EN-58.** Designate setbacks around environmentally sensitive areas to protect both the areas and the users.

**Policy EN-59.** Establish and maintain a secondary system of corridors to protect agriculture, timber, forest lands, and wildlife habitat and to provide linkages between critical areas.

**Policy EN-60.** Encourage preservation of these secondary corridors through incentives and regulations which will provide for public health and safety, and provide visual relief from urban structures and development.

**Policy EN-61.** Where appropriate combine all critical areas and environmentally sensitive areas with recreational facilities to provide public access and trail linkages through separators.

**Policy EN-62.** The final identification of environmentally sensitive or critical areas, hazardous sites or portions of sites should be established during the review of project proposals.

**Policy EN-63.** A review process should be established to make any changes in the inventory of environmentally sensitive areas.

**Policy EN-64.** Critical areas, or portions of critical areas, may be included in community separators.

**Atmospheric Conditions**

**Objective EN-M:** Protect and promote clean air and minimize individual and cumulative noise impacts to ensure a healthful environment.

**Policy EN-65.** Maintain high air quality standards through efficient land use patterns.

**Policy EN-66.** Promote air quality through reduction in emissions from industry, traffic, commercial, and residential uses.

**Policy EN-67.** Limit noise from construction activities to reasonable hours of the day and days of the week.

**Policy EN-68.** Limit the use of public address systems to ensure that noise does not spill over to adjacent land uses and activities on a daily basis.

**Policy EN-69.** Ensure that the design, placement, and use of any on-site equipment, such as air conditioning units or other equipment is accomplished in a manner which minimizes noise impacts on adjacent land uses and activities.

**Steep Slopes, Landslide, and Erosion Hazards**

***Discussion:*** *Renton is located in a geographically unique area. The walls of the plateaus and river valleys contain both steep and erosive conditions. Numerous landslides create costs borne by the public agencies every year and private owners often suffer property damage from these same events. Due to the high annual rainfall and soil conditions, erosion damage can occur on relatively level areas as well as steep ones. These policies set up standards which will protect public health, safety and welfare and allow development to proceed in appropriate areas.*

**Policy EN-70.** Land uses on steep slopes should be designed to prevent property damage and environmental degradation, and to enhance greenbelt and wildlife habitat values by preserving and enhancing existing vegetation to the maximum extent possible.

**Policy EN-71.** Allow land alteration only for approved development proposals or approved mitigation efforts that will not create unnecessary erosion, undermine the support of nearby land, or unnecessarily scar the landscape.

**Policy EN-72.** Mitigate problems of drainage, erosion, siltation, and landslides by decreasing development intensity, site coverage, and vegetation removal as slope increases.

**Policy EN-73.** Protect high landslide areas from land use development and roads.

**Policy EN-74.** Retain or replace native ground cover after construction in areas subject to erosion hazards. Special construction practices should be used, and allowable site coverage may need to be reduced to prevent erosion and sedimentation. Limitations on the time when site work can be done may also be appropriate.

**Policy EN-75.** Incorporate design elements which preserve and enhance the natural drainage system into developments in an effort to control erosion and sedimentation.

**Policy EN-76.** Design, locate, and construct utility systems in a manner which will preserve the integrity of the existing land forms, drainage ways, and natural systems.

**Seismic Areas**

**Objective EN-O:** Reduce the potential for damage to life and property due to seismic events.

**Policy EN-77.** Minimize the risk of structural damage, fire, and injury to occupants, and prevent post-seismic collapse by using special building design and construction measures in areas with high seismic hazards.

**Policy EN-78.** Prior to development in high seismic hazard areas, builders should conduct special studies to evaluate seismic risks and should use appropriate measures to reduce the risks.

**Coal Mine Hazards**

***Discussion:*** *The City of Renton has a long and rich history of coal mining. Most mining ceased by the end of World War II but the mines still remain. Some entrances have not been properly sealed, some shafts present potential for collapse, and some areas may generate methane gas. These hazards are often unnoticeable on the surface, but may present subterranean dangers for the property owners. These policies reflect the importance of identifying and regulating these areas.*

**Objective EN-P:** Reduce the potential for damage to life and property due to abandoned coal mines, and return this land to productive uses.

**Policy EN-79.** Identify areas which may be impacted by abandoned coal mines.

**Policy EN-80.** Develop land use plans and zoning to reflect the hazards to development in identified areas.

**Policy EN-81.** Allow land uses to locate in coal mine hazard areas, provided the hazards are precisely located and all significant hazards associated with the mines are eliminated, making the site as safe as a site which has not been previously mined.

**Policy EN-82.** Show the location of coal mine hazards on any plat or site plan maps. Such documents should be recorded.